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Beyond "move more": Feeling the rhythms of physical activity in mid and later-life.

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Abstract

The last two decades has seen growing unease regarding the negative health consequences of increasing levels of physical inactivity, both in the UK and further afield. Public health initiatives and interventions aimed at increasing levels of physical activity have therefore become somewhat commonplace. Within the current context of demographic change, with growing numbers of older adults and evidence that inactivity increases with age, these initiatives hold particular relevance to mid and later-life adults. Yet despite their prevalence, the policy gains from such promotional efforts have typically been modest at best, prompting calls to rethink our approach to physical activity. The prevalence of health messages encouraging people to 'sit less', 'move more' and most recently, 'move faster', has emerged alongside a deeper theoretical interest in active mobilities in everyday life.

Through our focus on the concept of rhythm, in this we paper provide an original contribution to recent attempts at rethinking approaches to physical activity in mid-life and beyond. We draw from three qualitative data sets from separate studies exploring health, wellbeing and ageing (two in the context of chronic health conditions and sensory impairments). Inspired by facet methodology, we advance knowledge by providing 'flashes of insight' into the subtle patterns and tempos that frame physical activity in mid and later life. In doing so, we offer alternative insight into how people avail themselves to, and experience motion and stillness during these life stages. That alternative, as we also note, has an important role to play in the development appropriate, *relatable* health messages regarding movement that recognises 'expertise by experience'.

Keywords: Rhythm; Physical Activity; Ageing; Wellbeing; Active Mobilities; Visual Impairment; Chronic Illness

1. Introduction: Insufficient Activity in a World Striving to Move More

For the last two decades, a growing unease has been building in relation to the negative health consequences of increasing levels of physical inactivity (Department of Health, 2004). Public health initiatives and interventions aimed at increasing levels of physical activity are commonplace and will likely receive a renewed focus with the forthcoming launch of the WHO Global Action Plan on Physical Activity 2018-2030 (WHO, 2017). Within the current context of demographic change, in which the number of older adults are increasing (AgeUK, 2017), and evidence that inactivity increases with age (Sport England, 2015), these initiatives hold particular relevance to mid and

later-life adults. Yet despite their prevalence, Nettleton and Green (2014) note that the policy gains from such promotional efforts have typically been modest at best, reflecting the limitations of the evidence base currently underpinning policy approaches and interventions relative to physical activity (see Hillsdon et al., 2001; Hawley-Hague et al., 2006). Similarly, Tulle (2017) has argued that "current analyses of why older people 'fail' to be physically active are flawed and lack critical depth". She advocates the need to consider interventions differently, "in ways which reflect the complex processes which govern how we put our bodies in movement" (p.171). Based on these critiques it is perhaps unsurprising that when it comes to addressing insufficient levels of physical activity, the WHO (2017) has concluded that "progress has been slow" (p. 2).

Responding to such calls to rethink our approach to physical activity, studies examining the physical, social and cultural environments that support and hinder participation – particularly in mid and later life – have gathered pace. These, and similar works provide a more nuanced insight into the complexities that are inherent to (becoming and) *being* physically active in the latter half of one's life (see also Allain and Marshall, 2017; Bennett, Hurd Clarke, Kowalski and Crocker, 2017; Boulton, Horne and Todd, 2017; Dionigi, 2017; Griffin, 2017; Authors). Moreover, projects like Mood, Mobility and Place, CycleBOOM, and Shape the Path have highlighted a number of perceived mobility choices and mobility behaviours in mid and later life within homes, neighbourhoods, and cities (e.g. Brookfield, Ward Thompson and Scott, 2017; Jones, Chatterjee, Spinney et al., 2016; Winters, Voss, Asche et al., 2015).

Alongside the increasing prevalence of health messages encouraging people to 'sit less', 'move more' and most recently, 'move faster' (BBC, 2017) interest in the 'new mobilities' perspective has also continued to develop (Sheller and Urry, 2006). For Adey, Bissell, Hannam, Merriman & Sheller (2013), this perspective has sought to emphasise how different mobilities are involved in making

people's lives meaningful, how mobilities are meaningful in and of themselves, and how mobility is inherently uneven and unequal. This interest in the "act of being mobile itself rather than moving to get somewhere to do something there" is characterised via a foregrounding of the *qualities* of mobility (Cook et al., 2015, p. 3).

One relevant strand of research in this regard, has focused on active mobilities in everyday life, including walking (Gatrell, 2013), cycling (Spinney, 2009), and jogging/running (Cook, Shaw and Simpson, 2016; Hitchings and Latham, 2017). There is still, however, much work to be done in this domain, not least with regards to how bodies keep tempo to the qualities of active mobilities as they age and change. Indeed, Adey, Bissell, Hannam, Merriman and Sheller (2013) maintain that concerns with particular experiences of time and distance must extend beyond an exclusive interest in velocity and fastness, to incorporate additional rhythmic experiences of, for example, de-acceleration, pauses, friction and stillness.

With these points in mind, the purpose of this paper is to use empirical data to examine some of the ways in which the subtle patterns and tempos of a diverse range of active mobilities are experienced in mid and later life. In doing so, we demonstrate the value of bringing the concept of rhythm into critical thinking around sport and exercise, health psychology and gerontology to provide a more detailed understanding of how people avail themselves to, and experience physical activity throughout these life stages. We believe this is crucial for informing physical activity policy, so that future recommendations and messages can better reflect the realities of those it intends to serve.

2. Methods

The paper draws from an overarching and ongoing programme of work examining experiences of health and well-being, ageing, illness, and impairment in mid and later life. Here we report on three separate studies within this programme (led by first author). A narrative constructionist approach was adopted for each study, which involves the primary emphasis being on "narratives as a vehicle through which our world, lives, and selves are articulated and the way in which narratives function within social relationships" (Sparkes and Smith, 2008, p. 298). Study characteristics and designs are presented in Table 1.

INSERT TABLE 1 APPROX HERE

This paper reports on the results of a narrative thematic analysis (Reissman, 2008) of the combined data sets, as they relate to the qualities of active mobilities. This involved revisiting the initial analyses for each dataset, paying particular attention to the themes and stories relating to participant experiences of physical activity (for purposes of leisure, work and/or domestic commitments) including their associated interruptions. When necessary, we returned to the original transcripts to remind ourselves of the full context in which the stories and themes were embedded. As separate studies, these data had been analysed inductively. However, once the stories and themes alluding to participant experiences of physical activity across the three studies had been brought together, we approached our further analysis from a new mobilities perspective. In particular, we remained analytically sensitive to the concept of *rhythm* via an attentiveness to

the subtle patterns and tempos that shaped participant engagement with a diverse range of active mobilities.

Our turn to an analytical interest in rhythm - relevant to each project, but yet to be examined in-depth – is in keeping with the iterative nature of analysis within qualitative research, which is never finalised nor complete (Sparkes and Smith, 2014). It is also inspired by Mason's (2011) explanation of facet methodology. For her, rather than attempting (often somewhat unsuccessfully) to describe and document all dimensions of a problem in its entirety, facet methodology enables researchers to use 'flashes of insight' gained through exploration of strategically and artistically chosen *facets* of a problem. For example, in this instance we sought to use 'flashes of insight' into the 'problem' of insufficient mobility and somewhat uncritical avocation to simply 'move more', gained through an exploration into the facet of *rhythm* with respect to active mobilities in mid and later life.

The rigour of facet methodology "comes ultimately from researcher skill, inventiveness, creativity, insight and imagination" (Mason, 2011, p. 75). This, Mason asserts, involves identifying and showing where insights have come from, where and how alternative interpretations have been sought out, and the reasons why those pursued are deemed convincing to the research team and beyond. The use of critical friends is crucial in this process. With regards to the current study, as we sought to provide meaningful, evocative and resonant interpretations of our analysis, we [i.e. enter first author initial and enter second author initial] acted as critical friends to each other. By offering different perspectives (ranging across sport and exercise, gerontology, critical health psychology, sociology of health and illness and health geography literatures), we were able to challenge and develop interpretations made by the other, driving a consensual construction, defence and support of, a coherent and theoretically sound argument (Smith and McGannon, 2017). Colleagues and

mentors also played a valuable role in this through feeding back on our early ideas as they were presented and subsequently discussed in seminar and conference environments. In addition to the use of critical friends, we drew from the work of Lieblich et al., (1998), Tracy (2010) and Smith (2017), to identify a list of criteria against which the quality of the work should be judged. These are its ability to: (i) evoke resonance, (ii) provide coherence by making meaningful interconnections between literature, research foci and interpretations, (iii) offer insightfulness through a sense of innovation and originality, (iv) make a significant contribution conceptually, practically and morally, and (v) provide analytical generalisability by re-examining established concepts and theories (i.e. rhythm) to produce new conceptual and theoretical understandings of being physically active in mid and later life.

3. Findings and Discussion

Our analysis identified how active mobilities occurred across different spatial scales, ranging from the micro-movements involved in, for example, tai chi or gardening, to routine practices of walking, cycling or swimming undertaken solely for the purpose of being active or whilst performing routine errands in the course of everyday life. Three different themes relating to rhythmicity were identified. We have termed these: (a) physical activity (aspirations) and the 'realities' of rhythm, (b) interrupted and apprehended motion, (c) slowing movement and (un)willful stillness. They each provide flashes of insight into how bodies, as they age and change, keep tempo to the qualities of active mobilities. They also demonstrate how rhythm can influence people's ability to avail themselves to bouts of physical activity over time, while also shaping the experience and meaning of these encounters.

3.1 Physical Activity (Aspirations) and the 'Realities' of Rhythm

According to Lefebvre, "[E]verywhere where there is interaction between a place, a time and an expenditure of energy, there is *rhythm*" (2004: 15). Our analyses highlighted the relevance of rhythm for how, when and where participants engaged with physical activity. These rhythms were multiple and operated at a range of different levels. Through repeated patterns, emerged a sense of structure within the organisational culture of the physical activity settings, and on the bodies within it. An example of this was captured in the following field notes:

> We sit with Jocelyn and her golf partner in the club house, waiting for our turn to tee off. At 10 – 15 minute intervals, pairs of players prepare to leave the warm comfort of the seated area and venture into the drizzling rain. The wait provides us with just enough time to buy and drink a cup of tea. This is clearly part of the routine for Jocelyn and her golf partner, who on their entrance had signalled their order to the barista before reserving their favoured seats with coats and bags, before going to pay. Seamless! The quiet humdrum of chat was interspersed periodically with purposeful clanking of cups and saucers by golfers sitting on other tables, the zipping up of jackets and heaving of golf club bags. "It's our turn next" said Jocelyn as she nodded at a group heading out in the wind and rain. "We'll just wait for them to get going and get onto the fourth hole, then it's our turn". Tea time over, we gathered ourselves hastily to avoid holding up the pair behind us.
>
> (Field notes [author], study one).

These observations offer a snapshot into the multiple rhythms that shape the experience of playing golf. The arrival of players, the swift ordering and consumption of refreshments maps onto a separate yet inter-related rhythm relating to the order and pacing of players. These inter-related multiple patterns of movement are described by Crang (2001) as *polyrhythmic ensembles*. They contribute to the familiarity and predictability of a specific active mobility (and the environment within which it takes place), which constitutes a resounding source of pleasure for many physically active older adults (Phoenix and Orr, 2014).

Maintaining the smooth running of these mobile rhythms within the context of active living requires the performance of further rhythmic procedures. Numerous examples of this were identified throughout the observational and interview data, including the cyclical replacement of or repair to equipment (e.g. specialist footwear, swimwear, racquets etc.). Also evident were the rhythms inherent to the scheduled construction of active space via, for instance, the temporary arrangement and rearrangement of furniture (clearing chairs and tables for indoor bowls, erecting nets, laying ropes to mark swimming lanes). Often the smooth running of participants' active mobilities also depended upon a broader regime of tending to the body through medication and for some, rehabilitation (re-balancing / mobility) exercises designed to regulate and recalibrate inner and often unwanted bodily rhythms such as vertigo (see Authors) or palpitations associated within ongoing heart conditions (Tulle and Dorrer, 2012). Finally, the smooth running of mobile rhythms was undoubtedly maintained via the scheduled maintenance of active spaces such as swimming pools (daily monitoring of chemical balance), halls (24 hour temperature programming), and walking routes (cutting back of seasonal plant growth, laying grit in cold weather). Thus, our data sets collectively demonstrated how habitual maneuvers and interactions were inherent to adults' active mobility practices. These simultaneously supplemented and depended on a repertoire of

broader physical, bio-social and environmental rhythmicities relating to infrastructure, materials, seasonality, climate, medication regimes / side effects, work patterns and so forth.

While this complex entangling of multiple rhythms was integral to the embodied, emplaced experiences of active living, their precariousness was undeniable; weather patterns changed, buses failed to arrive at scheduled times and places, medication prescribed to minimise illness symptoms during activity was not always taken in good time, volunteers (e.g. walking guides, instructors, village hall care takers) moved on, financial charges for (active) space underwent annual increases. The outcomes of such unravelling ranged from mobilisation of the activity group into alternative spaces and time slots to, in the worst scenarios, full group dispersal.

Our analysis demonstrated how physical activity is not a singular isolated event as can often be depicted within health policy. Rather it is enacted within numerous and varied habitual motions that provide an overall sense of rhythm and routine to being actively mobile. Yet the 'reality' of these polyrhythmic ensembles is that they are precarious with many possibilities for interruption and apprehension; a crucial aspect that can all too easily be overlooked by research, policy and practice advocating older adults to simply, move more.

3.2 Interrupted and Apprehended Motion

Our analysis also revealed how the rhythms of active living are continually interrupted, often resulting in the apprehension of planned activities. This could dislodge a sense of routine, which has previously been identified as an important component in how older adults derive pleasure from

physical activity (Authors). Speaking of how changing weather and unplanned family illness regularly apprehended her daily practice of sea swimming, Rachel explained:

> Every day I plan to go. The exception would be if the weather is so diabolical that we couldn't leave clothes dry and safe, because they would blow away or something, and if it was pouring with rain, because you can't put wet underclothes on. Or, if I have my little grandson, if he'd been ill and I needed to look after him in the morning. At the moment, he goes to a playgroup in the mornings and I pick him up at 12 o'clock and bring him home for the afternoon while my daughter works, so I can manage my swim still. Once or twice he's had croup or something and I have had him for the whole day so of course I couldn't take him down to the water.
>
> (Rachel, age 69, study one)

Disruptions to the rhythmicity of active mobilities provoked anomalies in people's time-space routines (van Eck and Pijpers, 2017). As illustrated by the example above, these disruptions to rhythms of physical activity did not arise from an individual's mind or their own cognitively derived motivation. Rather, they were relational encounters, in which participants "repeatedly couple and uncouple their paths" (Mels, 2004. p.16) with people, environments, social conventions, and commercial establishments. On occasions, this process of coupling and uncoupling could result in more permanent changes for people's mobility aspirations. Geoff's pairing and subsequent separation from his golfing partner, Ian, illustrated this in more detail. He said:

> I found that the local Golf Club was too much for me without a buggy because it's a very hilly course. So, I still play but I go around in a buggy, which isn't a great deal of, well, it is exercise but… Anyway, the point is that I played golf regularly using a buggy until a year ago when my regular partner died, and I haven't really played much since. I've been out a couple of times, but it's no fun if the guy you're with wants to walk the course, and you're in a buggy. With Ian, he'd also had a heart condition, so he was great in the buggy. We used to chat about this that, and it was social golf, you know. It isn't very social when one person is walking and one is in the buggy, so I hardly play at all now.
>
> (Geoff, age 67, study one)

These comments draw attention to how, in certain situations, shared synchronicity was particularly significant for sustaining active mobilities. In this example, the shared rhythmicity – and example of "coupling" – enabled by joint buggy use, facilitated a sense of place whereby the golf course could be experienced first and foremost as an active space for regular social encounters, fun and conversation. Death, however, "uncoupled" this synchronicity. The alternative mobilities (walking versus driving the buggy) subsequently trialled failed to sustain the *qualities* of mobility that, for Geoff, had framed his experiences of golf as a shared, meaningful and appealing endeavour. This is an important caveat for those lamenting, somewhat uncritically, the social benefits of physical activity involvement. Assuming that these benefits might be realised by merely facilitating the movement of bodies in and through shared space is over-simplistic. This is because it overlooks the mechanisms by which these bodies might couple and uncouple within that space, and the centrality of rhythmicity in that process (see also Hitchings and Latham, 2017).

The embodied nature of rhythmicity is highlighted by Edensor (2010), who notes how "rhythms are folded in and through the permeable body" (p. 4). Indeed, we would argue that disruptions to the rhythmicity of active mobilities can also occur in response to people's bodily *discomforts* and *emotions*, including symptoms associated with chronic health conditions, past injuries / surgeries, stiffness and soreness associated with their ageing process. Building on these sentiments, Edensor's (2013, p. 167) discussion of "somatic intrusions" provides a useful lens with which to further examine the consequences of this. Across our three data sets, there were numerous examples where the unexpected and unwanted foregrounding of one's fleshy physicality threatened participants' quests for regular movement. For instance, during an interview discussion about her diagnosis with colon cancer and the three subsequent episodes of major surgery, Jane explained:

> I sometimes don't feel too well. I feel a bit queasy or I seem to have gone back to having hot flushes again… and I feel shaky sometimes, I feel I can't go to keep fit, for example. I am not too bad in the open air, but bouncing around indoors, sometimes I don't feel quite fit enough to do that. When I'm swimming sometimes, instead of aiming at 20 lengths, I will just do 10 or 12, but it depends a lot on how I'm feeling because I don't feel fit all the time.
>
> (Jocelyn, age 69, study one).

Like other participants, Jane's account drew attention to the manner in which her capacity and inclination to move (more) was often compromised as a result of somatic intrusions, which foregrounded the contingencies of her body and health. The sense of regression and unpredictability often encountered as a result of her illness, impacted on the qualities of her mobility. These required ongoing attunement and adjustment to the possibilities of movement

("bouncing" or not), space (indoors or outdoors), and distance (deciding, for example, between 10 lengths or 20).

Similar levels of attentiveness to bodily rhythms and movement patterns were developed by those living with sensory impairments (e.g. sight, hearing/vestibular). Our data indicated how their mobility could all too easily be apprehended by somatic intrusions, which in turn had negative consequences for the active mobility practices that participants were aspiring to engage with. This example of walking with a white cane (following sight loss) is particularly illustrative in this regard:

> Just actually moving your hand back and forwards every pace. You know, if you go a mile and a quarter, that's quite a few hundred swipes of the cane. And you've got to hold the cane tight. So, you end up getting cramp in your hands, and in your wrist and your elbow and that. And then you can mis-time your stepping and walk into something, or over-hanging bushes. You've got so much to think about, so sometimes it's just easier to jump on the bus and go into town than actually walking, you know?
>
> (Keith, age 59, study two)

Somatic intrusions, experienced here as cramping hands, wrist and elbow, and the greater fatigue experienced through having to 'read' the environment in this way, had the potential to become what Marston and colleagues (2005) describe as "blockages" and "coagulations" within an often-assumed and indeed expected fluidity of mobilities (p. 423). Keith's comments point to a sense of despair as these bodily discomforts (and indeed environmental intrusions) operate to almost relentlessly block his access to an imagined fluid, flowing walk into town. Notable here is the

increasing temptation to restore fluidity by abandoning the idea of walking altogether in favour of taking the bus.

Cresswell (2013) has argued that the dominant focus on the world of flows and synchronised rhythmicity, distracts analytical attention away from what he describes as being "the stickiness of space and place" (p. 114). Being attentive to the ways in which friction is encountered and negotiated within the context of physical activity, can provide novel insight into how the relative motion of bodies and 'things' (material and non-material) sliding or rubbing against each other impact on the qualities of mobilities, and people's capacity to move smoothly and freely. This was often exemplified empirically by dog owning participants, who, speaking of their daily walk, recounted stories of canine friends with "their own agenda", stopping repeatedly, often without warning to frantically sniff at enticing spots along the route. In as much as dogs were largely responsible for an unwavering routine of daily walking (see Wu, Luben and Jones, 2017), so too were they "sticky" (particularly when on a lead); a source of many tangles, trips, and abrupt interruptions to owners' aspirations of fluidity.

The possibility of colliding with human and non-human objects was an important feature in how active mobilities were experienced by many of the participants. This was particularly the case for those living with a sensory impairment, but also included those living with conditions that on occasion could heighten their feelings of fragility and vulnerability (e.g. osteoporosis, limited physical mobility). For example, John, who had been living with a visual impairment for 15 years, commented:

> You've got to think which side of the path you're on, where the pavement curbs are, where the grass is. Listening for other people, traffic, for people on the pavements on bicycles. And coming across unexpected obstacles like the gas board digging the road up, or digging a path up. You always have to be alert.
>
> (John, age 67, study two)

Cresswell's (2013) notion of friction provides a useful analytical lens to further understand how potential collisions might diminish the quality and pace of active mobilities. Describing a "generative typology of frictions", Cresswell proposes the notion of *static* friction to describe "the friction that exists between two bodies that are not moving relative to each other" (p. 109). In this case, he argues, friction operates to hold these two bodies *in place*. Using the soundscapes of his environment as cues and clues for how and when to position his body, John's comments illustrate how static friction is generated to 'hold in place' his own impaired body in relation to a polyrhythmic ensemble of pedestrians, cyclists, traffic, street litter, road workers and so forth to avoid collision or subsequent *coagulation* (see Marston et al., 2005).

The quality of participant mobilities was also negatively impacted by *kinetic* friction; that which occurs when two surfaces – usually one static and one moving - slip against each other (Cresswell, 2013). Describing this experience, John continued:

> … I was walking down here one day, just with the [guide] dog. A tractor was coming up behind me, and he was loaded. So, I got myself facing the hedge, with the dog, pushing into the hedge with my knees. He went by me and caught the back of me with the rear wheel of his muck cart. He just kept going on, he never stopped.

Our analysis showed how friction is a complex and multidimensional force that can slow or stop active mobilities by shaping the meaning of mobilities, whilst also reflecting exclusive arrangements of power (i.e. the privileging of fast, able, balanced bodies, - a point we return to below). In this sense, Cresswell notes, friction is a social and cultural phenomenon that is lived and felt.

That the rhythm of active mobility can, as indicated by our analysis, be interrupted and apprehended via relational encounters further questions the value of an almost exclusive appetite for interventions aimed at increasing levels of physical activity within the sport, exercise and health sciences, designed around individualised, cognitively driven behaviour change approaches (critiques and exceptions noted in the introduction to this paper). Moreover, it extends some of the more common critiques, which advocate a focus on social context (e.g. via socio-ecological theory) by incorporating concepts from the human geography literature to understand the roles of rhythm and motion within relationality.

3.3 Slow Movement and (Un)willful Stillness

Interrupted and apprehended mobilities contributed to participant experiences of slowness and deceleration. For example, many recounted examples of struggling to keep tempo and subsequently moving "out of time" from the "fast paced" music that often drove the rhythm of exercise classes (e.g. aerobics, Zumba©). Some described feeling "left behind" and "ostracised" in walking groups where other members were known for "speeding on ahead". Others spoke of striving to accomplish slowness by gravitating to spaces where slower rhythms were purposefully accommodated. This included public swim sessions where sections of the pool were physically

cordoned off and assigned to bodies moving at a slower pace (i.e. “the slow lane”). Of significance however, despite these attempts to control and organise the speed and flow of movement, congestion could still arise. In these instances, slowness was stilled altogether:

> At the leisure Centre they do a lane swim and they have a slow lane, a faster lane and a really fast lane. It’s on a Sunday morning. I go in the slow lane, but everybody wants to be in the slow lane, you know, the slow lane is absolutely crowded, so you can’t move… You’re supposed to go around people, but if you can’t see, you can’t get around an object like that. It’s out of the question. So often swimming slowly in the slow lane even, I just can’t do it.
>
> (Carol, age 68, study two)

These comments draw attention to the manner in which the speed and flow of movement is influenced by structural forces and power dynamics. While slow(er) swimming proves to be popular (“everybody wants to be in the slow lane”), the inadequate provision of pool space for those availing themselves to slow mobilities is perhaps significant and might arguably signal the prioritisation of bodies that boast speed and efficiency – “faster” and “really fast” – within shared public spaces. Similar to the fast-paced exercise classes, and quick-footed walking groups, for some, the outcome of such arrangements was withdrawal from the activity; their plans for slow movement being abruptly halted.

Participants also sought slowness as a means of accomplishing *stillness* and escapism. In these instances of “willful stillness” (Bissell and Fuller, 2011, p.5) ‘mindful’ movements like yoga, T’ai Chi and for some, walking, represented a tactical shift *to slow*, immersing oneself in the stillness of the

present (Phoenix and Orr, 2014, 2017). This process facilitated a welcome counter to "an ever increasingly pervasive regime built around the logic of speed" (Vannini, 2013, p. 116). This is not to suggest however, that stillness was only ever a "countercultural choice", pursued as a gesture of resistance to a social world that felt increasingly *on the move* (p. 122). Rather, participants often recounted their *desire* for stillness in response to the embodied sensations of fatigue or discomfort, brought on by movement, illness symptoms and loss. Particularly illustrative in this regard were the accounts offered by participants with Ménière's disease, many of who experienced severe episodes of vertigo on a regular basis. For them, in as much as their world was *on the move*, it was also often experienced as physically *moving*, with embodied stillness being sought to counter this sense of motion:

> I have to lie down. I have to lie down wherever I am, it doesn't matter, I tend to lie down. You actually feel you want to go lower than the floor.
>
> (Yvonne, 61-70yr bracket, study three)

Notably, these participants also demonstrated forms of resistance; not to the social world or cultural imperatives to 'move more', but rather to the illness itself. Examples of how participants balanced sensations of vertigo-induced spinning with stillness in order to pursue meaningful opportunities for micro-movement can be observed in comments offered by Emily:

> Even when I was quite poorly I'd be out looking after my pots in the garden, but I'd be standing and then all of a sudden I'd be knelt down on the floor. I'd be holding onto the pot

> trying to still myself, but I'd still be doing it. I did always think, there was a little bit of defiance in there, you're [the Ménière's] not going to have everything!
>
> (Emily, 51-60yr age bracket, study three).

Elsewhere, participants also spoke of an enforced stillness; a need for "quiet time", to "just sit", often during or following a spate of home maintenance (e.g. spring cleaning, work in the garden), hosting visitors, periods of ill health, recurrent movement between various medical appointments (hospitals, doctors, nurses), and care responsibilities (grandchildren, children, parents). Sid who lived with a heart condition, a benign prostate and stiff joints said:

> Now and then, I'll think 'right, I'll have a day off'. And I think probably I feel sometimes that I am doing too much... That day off I'd be quite happy to sit down leisurely and read some of my books, to not rush around doing things.
>
> (Sid, age 81, study one)

While stillness is commonly viewed within health policy and the exercise and health literature as a problem to be dealt with, our analyses showed how it played an important role in maintaining wellbeing; namely, by providing restoration and opportunities for the recalibration of more manageable mobility rhythms, enabling participants to gather momentum for future and further mobilities. These "still" punctuations were played out within *moorings*. That is, the "more-or-less stable points that facilitate movement" (Cresswell, 2013 p. 108). As exemplified in the above comments, walls, floors, and chairs were crucial here.

The importance of moorings was also clear amongst participants trying to “still” the emotional turbulence of bereavement, which acted to uncouple and arrest the rhythms of daily routines (going out, doing things) that had co-evolved with loved ones over many years together. In this way, participants demonstrated the potential to be stilled by loss, and the need to respect that stillness as an important part of bereavement.

> “The hardest thing when my wife died was the motivation to do anything, go anywhere, to move really. I didn’t realise the stress I’d been under, to be honest. We didn’t talk about the possibility of her death. I didn’t mention it because she was so positive and I didn’t want her head to drop. She, I think, didn’t mention it because she didn’t want to worry me. But, when it was all over, funeral and all the rest I don’t think I did anything for three weeks except sleep, you know. And then I couldn’t ... it seemed to be too much trouble to get out of the chair.”
>
> (Timothy, age 71, study one)

Taken together, these examples highlight how slowness – and indeed stillness – are relationally constructed; experienced as an outcome that is entwined with, and acted upon by other bodies that move faster, differently or (pass) away. At a time when the regulatory potential of physical activity adherence is being strengthened by the discovery that sedentary behaviour is a determinant of ill health (see Tulle, 2015), by remaining cognisant of the rhythmic experiences highlighted by Bissell et al. (2013) (such as de-acceleration, pauses, friction and stillness), our

analysis of slow movement and stillness in mid and later life provides an original and purposefully provocative contribution to how movement and stillness are currently framed within sport and exercise and gerontology literatures in relation to healthy ageing.

4. Concluding Comments

In this paper we have responded to calls to develop new theoretical and empirical knowledge of ageing, health and wellbeing by situating research at the intersection of different disciplines (see Andrews, Cutchin, McCracken and Wiles, 2007; Tulle and Phoenix, 2015; Author). We have achieved this by, for the first time, bringing the concept of *rhythm* into critical thinking around physical activity in mid and later life, forging unique and useful connections between sport and exercise, critical health psychology, geography and gerontology literatures. Three important lessons can be taken from the results of this analytical interest. Collectively, these lessons advance our understanding of the subtle patterns and tempos that frame physical activity among participants, who were often living with shifting health conditions and varying family circumstances.

The first lesson relates to the complexity, interdependency and ultimately precariousness of the polyrhythmic ensembles that governed adults' involvement in physical activity. These polyrhythmic ensembles represented broader physical (e.g. replacement of specialised equipment), bio-social (e.g. pre-planned or responsive use of medication, or (re-)scheduling activities around illness symptoms) and environmental (e.g. seasonality) rhythmicities, which, in turn interacted with those of other material and non-material affordances and temporalities of place. Disruption to flow in one domain (e.g. a change in venue due to scheduled maintenance; alterations to medication that threw illness symptoms into disarray; timetabled transport that failed to arrive) could invariably

have negative consequences for rhythmic functioning elsewhere; interrupting and even terminating participants' aspirations for, and performances of active mobility.

A second lesson concerns the relational dimensions of rhythmicity and the consequences of "*moving* slower than a significant or generalized other" (Vannini, 2013, p. 121). Active mobilities are not experienced within a social vacuum but in relation to material and non-material others in ways that create and sustain power (see Hansen and Philo, 2007). Thus, being physically struck by a faster moving tractor trailer while out walking, feeling excluded from a tightly choreographed dance class, or restricted within an oversubscribed 'slow' swimming lane, all reinforce the notion that slow, slowing, and still bodies are problematic in their inability to keep tempo with a world on the move. Unable to perform, respond to - or at - 'speed', these bodies can withdraw or be excluded from a diverse range of active spaces. These sentiments resonate with discussions found within the disability literature regarding the social-relational model (see Thomas 2007). They also support the qualitative observations of researchers providing context-specific insight into social and environmental facilitators and barriers to physical activity in older age (e.g. Guell, Griffin and Ogilvie, 2016; Grant, Edwards, Sveistrup et al. 2010). A focus on rhythm has generated a more nuanced understanding of these social and environmental influences on physical activity. Specifically, it encourages us to look beyond the mere *presence* of motivators/barriers, to examine how and why stabilities and instabilities in dynamic material and social relational configurations intersect with ageing bodies to shape meaningful opportunities for, and experiences of, physical activity in mid to later life

Building on from this, a third lesson relates to the need to incorporate notions of deceleration, slowness, and stillness into discussions and articulations of physical activity across the life course in

more positive ways. For example, periods of insufficient mobility or stillness are currently framed as "a departure from what is considered normal, expected and subsequently welcomed" (Bissell and Fuller (2011). As a consequence, stillness has become a problem to be fixed; a moment of missed productivity. This negative framing of stillness weaves through current discourses of physical inactivity and sedentary behaviour (see Knox, Biddle, Esliger et al., 2014; for a critique of this, see Tulle, 2015). In this context, to not move, or to move too little, is to resist health-enhancing behaviours. Our interpretation of stillness, however, responds to calls by Bissell and Fuller (2011) to go beyond a reductive understanding of stillness as resistance, by providing greater insight into its causes, timing, generative potential and meaning. Through this paper, we therefore extend knowledge by demonstrating how stillness was sought by our participants to escape, rest and restore energy, manage the physical symptoms of illness, and the emotional turbulence of grief. Thus, rather than framing stillness as a sedentary behaviour and form of resistance to public health directives to "move more", we demonstrate its empowering role in maintaining health and wellbeing in mid and later life.

Future research in this domain has the capacity to provide detailed insight into people's aspirations to be active or otherwise in mid-later life, along with the relational and rhythmical strategies they use to put such aspirations into practice. Drawing from the array of mobile methods developed in recent years to deal with "the fleeting, distributed, multiple, non-causal, sensory, emotional and kinaesthetic", would be particularly beneficial here (BÜscher, Urry and Witchger, 2001, p. 1; e.g. see also Bell, Phoenix, Lovell and Wheeler, 2015; Middleton, 2011; Spinney, 2014). Furthermore, following Guell et al. (2015), we maintain that if disease prevention strategies aim to empower adults to pursue choices that facilitate 'healthy ageing', this insight can be used to develop appropriate, *relatable* health messages that recognise 'expertise by experience' (NHS, 2014). The

almost exclusive focus of current health messaging on the need for people to simply, *move more* (and in some instances, move faster), downplays important *qualities* of active mobilities (including those associated with rhythm) and risks undermining people's efforts to achieve a *manageable* balance between stillness and activity in the context of changing and often challenging social, physical and environmental life circumstances. We do not deny the well documented benefits of regular motion, the global grand challenge of insufficient activity, nor as noted elsewhere, the difficulty for public health policy and messaging to accommodate complexity (see Phoenix and Orr, 2017). However, we are equally mindful of the limited long term success that currently plagues too many interventions aimed at improving health via physical activity within this age group. To that end, we hope this paper encourages those seeking to understand and advocate movement throughout these life stages to think beyond sheer volume (i.e. move more) and recognise the central role of rhythmicities – for better, as well as worse. After all, to borrow from Bissell et al. (2013), movement is as much about the slowing down, the getting stuck, and the consequences this has for embodied, emplaced experiences.

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Study characteristic	Study 1 (Phase 1 only)	Study 2	Study 3 (Phase 2 only)
Title	Moving Stories: Understanding the role of physical activity on perceptions and experiences of (self-)ageing.	Physical activity among older people with sight loss: A qualitative research study to inform policy and practice.	Living with Ménière's Disease: Understanding patient experiences of mental health and well-being.
Guiding research question	How do physically active older adults experience the ageing process?	What are the experiences of physical activity among older adults with late onset sight loss?	How do patients experience Ménière's Disease in everyday life?
Theoretical approach	Narrative social constructionist. Elements of phenomenology for photo-elicitation task.	Narrative social constructionist.	Narrative social constructionist.
Inclusion criteria	Age 60 yr + Self-defined as exercising on a regular basis. English speaking Range of activities sought.	Age 60 yr + Adults with acquired sight loss (i.e. non-congenital).	Medically diagnosed with Ménière's Disease. Experienced symptoms within previous 12 months.
No. of participants	51 (m = 23; f = 28)	48 (m = 24; f = 24)	20 Patients (m = 4; f = 16)
Ethnicity	White Caucasian	46 x White Caucasian 1 x Asian 1 x South-Asian	White Caucasian
Age (yr)	Range = 60 – 92 Average = 68	Range = 60 – 97 Average = 70	Range = 30 – 75 Breakdown of patient no. per age bracket: (31 – 40) n=3 (41 – 50) n=2 (51 – 60) n=7 (61 – 70) n=6 (71 – 80) n=2
Research site	UK (South West England)	UK (South West England; East Midlands; London).	UK (South West England)
Period of data collection.	January – December 2012	November 2012 – May 2013	January – June 2015
Method(s) of data collection	Life history interviews	Life history Interviews Go-along interviews	Life history interviews Field notes

	'Go-along' photography interviews with 32 of the participants (Capriano, 2009). Field notes	Field notes	
Total data gathered	Approx. 110 hours of interview recordings. 340 photographic images Reflexive research journal 30 task specific participant written responses.	Approx. 95 hours of interview recordings.	Approx. 55 hours of interview recordings.
Type of data analyses conducted	Categorical-content analysis (Lieblich, Tuval-Mashiach and Zilber, 1998). Performative analysis (Holstein & Gubrium, 2004).	Inductive thematic analysis (Braun and Clarke, 2006).	Thematic narrative analysis (Riessman, 2008)
Ethical approval	University of (to be completed)	University of (to be completed)	University of (to be completed)
Associated publications	LEFT BLANK TO PROTECT INTEGRITY OF ANONYMOUS PEER REVIEW PROCESS	LEFT BLANK TO PROTECT INTEGRITY OF ANONYMOUS PEER REVIEW PROCESS	LEFT BLANK TO PROTECT INTEGRITY OF ANONYMOUS PEER REVIEW PROCESS
Funder	Economic and Social Research Council	Thomas Pocklington Trust	The Ménière's Society

Table 1: Characteristics of the three separate studies reported on in this paper.